

23 VERY FINE SANDY LOAM,

~~Finley~~ <sup>GRAVELLY</sup> ~~0 to 2 percent slopes.~~ \$T1This very deep, well  
drained soil is on terraces, ~~and alluvial fans.~~ It formed in ~~alluvium.~~  
The native vegetation is mainly grasses, forbs, and shrubs. Elevation  
is 600 to <sup>1000</sup> ~~1,500~~ feet. The average annual precipitation is 6 to 9 inches,  
the average annual air temperature is about 50 degrees F, and the average  
frost-free season is ~~135 to~~ 180 days.

~~Typical of the Sagehill, Gravelly Substratum, Neppel Soils, and Royal Soils.~~  
TYPICALLY, THE SURFACE LAYER IS GRAYISH BROWN VERY FINE SANDY LOAM 4 INCHES  
THICK. THE SUBSOIL IS YELLOWISH BROWN VERY FINE SANDY LOAM 8 INCHES THICK. THE  
<sup>TO A DEPTH OF 60 INCHES</sup>  
SUBSTRATUM IS LIGHT BROWNISH GRAY VERY GRAVELLY FINE SANDY LOAM. THE SOIL IS  
CALCAREOUS BELOW A DEPTH OF 12 INCHES.

SAGEHILL, GRAVELLY SUBSTRATUM, NEPPEL SOILS,  
\$I01Included in this unit are small areas of ~~Sagehen, Socon, and Burke~~  
AND ROYAL SOILS.  
~~soils.~~

\$I01Permeability of this Finley soil is moderately rapid above the  
substratum and very rapid through it. Available water capacity is moderate.  
Effective rooting depth is 60 inches or more. Runoff is very slow, and  
the hazard of water erosion is slight.

\$I01This unit is used for irrigated crops and as wildlife habitat and  
homesites. The main irrigated crops are grain, grapes, hops, mint, and  
peas. Grasses and legumes are grown for hay, pasture, and seed.

\$I01The main limitation for irrigated crops is moderate available water  
capacity. Furrow, corrugation, drip, and sprinkler irrigation systems  
are suited to the soil in this unit. The type of system used depends on the

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kind of crop grown. If surface irrigation systems are used, the risk of erosion can be minimized by keeping runs short. Use of sprinkler and drip irrigation permits the even, controlled application of water, reduces runoff, and minimizes the risk of water erosion. Cultivation prior to irrigation improves the water infiltration rate; however, the fine soil particles dislodged during cultivation are highly susceptible to water erosion. This makes the initial period of irrigation extremely critical. Irrigation without alternate cultivation reduces the water infiltration rate of this soil. The water application rate should be reduced accordingly to help control runoff, erosion, and the production of sediment. To avoid loss of water and leaching of plant nutrients from overirrigation, applications of irrigation water should also be adjusted to the available water capacity and the crop needs.

\$I01 Use of minimum tillage and return of crop residue to the soil help to maintain or improve organic matter content, improve infiltration, and help to maintain tilth. Tillage reduces the effectiveness of crop residue in controlling dustiness. Using high residue crops in the rotation 25 percent of the time helps to maintain the organic matter content. Using vegetated filter strips at the end of rows and sediment ponds reduces the volume of sediment in tailwater.

\$I01 This unit is well suited to homesite development. It has few limitations. Dustiness can be a problem during construction on large building sites; therefore, these sites should be disturbed as little as possible. Cutbanks are not stable and are subject to caving in.

\$I01 The main limitation for septic tank absorption fields is seepage. If the density of housing is moderate to high, community sewage systems are

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needed to prevent contamination of water supplies as a result of seepage from onsite sewage disposal systems.

\$101 This map unit is in capability subclass IIIs, irrigated.

E P A PROJECT

ECOLOGY AND ENVIRONMENT, INC.

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SUBJECT: ~~PP~~ *Resource Recovery - Pasco Water Intake*

DATE: *1/18/85*

CC:

COMMENTS: